

# World Resources Company

Form: FM-M01

## RECYCLABLE MATERIAL PROFILE

**EXHIBIT A**

Generator Name: Alaskan Copper Works

Company I.D. #: 22149-001-01

### A. Generator Information

1. Address: 3200 Sixth Avenue South

P.o. Box 3546

Seattle

WA

98124

2. Contact: Gerald Thompson

Title: Environmental Assistant

3. Material EPA Waste Code: F006

4. Generator's EPA I.D. Number: WAD980738546

5. Generator's State I.D. Number:

### B. Recyclable Material Characteristics

<b>1. Color(s):</b> <u>Brown</u> 		<b>6. Texture</b> (similar to) <input checked="" type="checkbox"/> Wet Clay <input type="checkbox"/> Dry Clay <input type="checkbox"/> Sand <input type="checkbox"/> Powder <input type="checkbox"/> Other		<b>7. Appearance</b> <input checked="" type="checkbox"/> Homogenous <input type="checkbox"/> Bilayered <input type="checkbox"/> Multilayered		<b>9. Free Liquids</b> (EPA SW 846, Method 9095) <input checked="" type="checkbox"/> Not Present <input type="checkbox"/> Present	
<b>2. Odor</b> (none, mild, strong) <u>None</u> Description of Odor:				<b>10. Debris</b> <input checked="" type="checkbox"/> Not Present <input type="checkbox"/> Present		<b>11. Reactivity</b> <input checked="" type="checkbox"/> Not Reactive <input type="checkbox"/> Reactive	
<b>3. Moisture</b> (wet, damp, dry) <u>Wet</u> Percent Solids: 21.8		<b>8. Organic Vapors</b> <input checked="" type="checkbox"/> Not Present (< 1ppm) If present, identify compounds and amount in ppm on a wet basis. <input type="checkbox"/> Present		<b>12. Radionuclides</b> (ASTM D5928-96) <input checked="" type="checkbox"/> Not Detected <input type="checkbox"/> Detected		<b>13. Cyanide Gas HCN</b> <input checked="" type="checkbox"/> Not Detected <input type="checkbox"/> Detected _____ ppm	
<b>4. pH</b> (EPA SW 846, method 9040/9045) pH: 6.84		<b>5. Ignitability</b> (40 CFR § 261.21) <input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL					

### C. Analytical Data

(Content on a dry weight basis in ppm or %)

Constituent *		Content	Qualifier	Constituent *		Content	Qualifier
1. Aluminum <sup>1</sup>	Al	4577.4 ppm	M3	19. Magnesium <sup>1</sup>	Mg	1636.7 ppm	
2. Antimony <sup>1</sup>	Sb	24.6 ppm	M2	20. Manganese <sup>1</sup>	Mn	5483.4 ppm	
3. Arsenic <sup>1</sup>	As	56.3 ppm	M2	21. Mercury <sup>1</sup>	Hg	< 3.3 ppm	
4. Barium <sup>1</sup>	Ba	79.9 ppm		22. Nickel <sup>1</sup>	Ni	56882.5 ppm	
5. Beryllium <sup>1</sup>	Be	< 10.0 ppm		23. Selenium <sup>1</sup>	Se	< 50.0 ppm	M2
6. Bismuth <sup>1</sup>	Bi	58.6 ppm		24. Silver <sup>1</sup>	Ag	< 5.0 ppm	
7. Cadmium <sup>1</sup>	Cd	< 20.0 ppm		25. Thallium <sup>1</sup>	Tl	< 20.0 ppm	
8. Calcium <sup>1</sup>	Ca	9520.8 ppm		26. Tin <sup>1</sup>	Sn	< 100.0 ppm	M3
9. Chloride <sup>4</sup>	Cl <sup>-</sup>	0.14 %		27. Zinc <sup>1</sup>	Zn	680.7 ppm	
10. Chromium, Hexavalent <sup>2</sup>	Cr <sup>+6</sup>	2893.0 ppm					
11. Chromium, Total <sup>1</sup>	Cr	45442.1 ppm					
12. Cobalt <sup>1</sup>	Co	720.9 ppm					
13. Copper <sup>1</sup>	Cu	62357.0 ppm	M3				
14. Cyanide, Amenable <sup>3</sup>	CN <sup>-</sup>	not analyzed					
15. Cyanide, Total <sup>3</sup>	CN <sup>-</sup>	< 45.9 ppm					
16. Fluoride <sup>4</sup>	F <sup>-</sup>	0.57 %					
17. Iron <sup>1</sup>	Fe	263294.0 ppm	M2				
18. Lead <sup>1</sup>	Pb	142.9 ppm					

**\* Analytical Procedure References**

1. EPA Method SW846 3050 / 6010 (Digestion / Analysis)

2. EPA Method SW846 3060 / 7196 (Extraction / Analysis)

3. EPA Method SW846 9010 / 9213 or 9014 (Distillation / Anaylsis)

4. HNO<sub>3</sub> or H<sub>2</sub>O<sub>2</sub>/ EPA Method SW846 9056 (Digestion / Analysis)

#### \* Analytical Procedure References

1. EPA Method SW846 3050 / 6010 (Digestion / Analysis)
2. EPA Method SW846 3060 / 7196 (Extraction / Analysis)
3. EPA Method SW846 9010 / 9213 or 9014 (Distillation / Analysis)
4. HNO<sub>3</sub> or H<sub>2</sub>O<sub>2</sub> / EPA Method SW846 9056 (Digestion / Analysis)

### D. Certification

I hereby certify that all information submitted in this profile is complete and accurate to the best of my knowledge and belief.

Signed: 

Date: 8/25/06

Title: Laboratory Manager

AZ DHS #: AZ0586



# World Resources Company

Form: FM-M01

## QA/QC DATA

**EXHIBIT A**

**Generator Name:** Alaskan Copper Works

**Company I.D. #:** 22149-001-01

**QA/QC Criteria:** All analyses met method criteria unless otherwise noted.

### Explanation of Data Qualifiers:

- M3**      The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level.  
            The method control sample recovery was acceptable.
- M2**      Matrix spike recovery was low, the method control sample recovery was acceptable.



# World Resources Company

Form: FM-M01

## SAMPLE COLLECTION & ANALYSIS COMPLETION DATES

## EXHIBIT A

Generator Name: Alaskan Copper Works

Company I.D. #: 22149-001-01

Constituent		Sample Date	Completion Date	Sample Technician
1. Aluminum	Al	04/05/2006 14:26	07/24/2006 14:06	LEONEL GARCIA
2. Antimony	Sb	04/05/2006 14:26	07/24/2006 14:06	LEONEL GARCIA
3. Arsenic	As	04/05/2006 14:26	07/24/2006 14:06	LEONEL GARCIA
4. Barium	Ba	04/05/2006 14:26	07/24/2006 14:06	LEONEL GARCIA
5. Beryllium	Be	04/05/2006 14:26	07/24/2006 14:06	LEONEL GARCIA
6. Bismuth	Bi	04/05/2006 14:26	07/24/2006 14:06	LEONEL GARCIA
7. Cadmium	Cd	04/05/2006 14:26	07/24/2006 14:06	LEONEL GARCIA
8. Calcium	Ca	04/05/2006 14:26	07/24/2006 14:06	LEONEL GARCIA
9. Chloride	Cl <sup>-</sup>	04/05/2006 14:26	04/07/2006 12:00	LEONEL GARCIA
10. Chromium, Hexavalent	Cr <sup>+6</sup>	04/05/2006 14:26	04/25/2006 15:00	LEONEL GARCIA
11. Chromium, Total	Cr	04/05/2006 14:26	07/24/2006 14:06	LEONEL GARCIA
12. Cobalt	Co	04/05/2006 14:26	07/24/2006 14:06	LEONEL GARCIA
13. Copper	Cu	04/05/2006 14:26	07/24/2006 14:06	LEONEL GARCIA
14. Cyanide, Amenable	CN <sup>-</sup>			
15. Cyanide, Total	CN <sup>-</sup>	04/05/2006 14:26	04/12/2006 12:00	LEONEL GARCIA
16. Fluoride	F <sup>-</sup>	04/05/2006 14:26	04/07/2006 12:00	LEONEL GARCIA
17. Iron	Fe	04/05/2006 14:26	07/24/2006 14:06	LEONEL GARCIA
18. Lead	Pb	04/05/2006 14:26	07/24/2006 14:06	LEONEL GARCIA
19. Magnesium	Mg	04/05/2006 14:26	07/24/2006 14:06	LEONEL GARCIA
20. Manganese	Mn	04/05/2006 14:26	07/24/2006 14:06	LEONEL GARCIA
21. Mercury	Hg	04/05/2006 14:26	07/24/2006 14:06	LEONEL GARCIA
22. Nickel	Ni	04/05/2006 14:26	07/24/2006 14:06	LEONEL GARCIA
23. Selenium	Se	04/05/2006 14:26	07/24/2006 14:06	LEONEL GARCIA
24. Silver	Ag	04/05/2006 14:26	07/24/2006 14:06	LEONEL GARCIA
25. Thallium	Tl	04/05/2006 14:26	07/24/2006 14:06	LEONEL GARCIA
26. Tin	Sn	04/05/2006 14:26	07/24/2006 14:06	LEONEL GARCIA
27. Zinc	Zn	04/05/2006 14:26	07/24/2006 14:06	LEONEL GARCIA





## World Resources Company

8113 W. Sherman St.  
Tolleson, AZ 85353-4025

Tel: 800.972.1955  
Fax: 623.936.9164

August 25, 2006

Mr. Gerald Thompson  
Environmental Assistant  
Alaskan Copper Works  
3200 Sixth Avenue South  
P.o. Box 3546  
Seattle, WA 98124

Dear Mr. Thompson:


In accordance with the recycling Agreement with your company, World Resources Company (WRC) provides a "RECYCLABLE MATERIAL PROFILE" (RMP) each contract year. Enclosed, for your records, is a completed RMP for the material generated at your plant. If a qualifier is indicated on the RMP, WRC has provided a quality assurance/quality control case narrative to validate the constituent's result(s).

The concentration of metals reported on the RMP is the total concentration of each metal on a dry basis. The recyclable material is prepared for analysis by first grid-sampling and then drying the selected sample in the laboratory oven at 103°-105° centigrade in order to obtain a homogeneous dry sample (Standard Methods For The Examination of Water and Wastewater, 15th Edition, published by the American Public Health Association 1980, Method 209A "Total Residue at 103°-105° centigrade"). Therefore, these results are generally higher than the concentrations of your material as it leaves your facility. You should multiply these dry concentrations by the decimal form of your percent solids (i.e. 50.0% = 0.50) to obtain the concentration of your material as it leaves your plant.

WRC appreciates your business and looks forward to a long and mutually beneficial recycling relationship. Please feel free to call me at (800) 972-1955 with any questions you may have regarding the enclosed RMP. Thank you for your interest in recycling.

Sincerely,

World Resources Company



Jason Hensley  
Laboratory Manager

Enclosures





February 2, 2006

Gerald Thompson  
Environmental Assistant  
Alaskan Copper Works  
P.O. Box 3546  
Seattle, Washington 98124-3546

Dear Mr. Thompson:

In accordance with the requirements of the Washington State Department of Ecology, World Resources Company (WRC) is happy to provide you with the following information needed to determine the exact amount of Alaskan Copper Works material recycled by WRC during the 2005 calendar year.

WRC is aware that the State of Washington requires a copy of the recycling credit documentation. In the past, Ms. Holly Sullivan at the Department of Ecology has been receptive to a copy of this letter as sufficient proof of recycling credit documentation.

The following information is provided for use in your submittal:

Total Wet Tons Received:	7.84
Average Percent Solids:	24.02
Total Dry Tons:	1.87
Total Percentage Recycled:	100% less 75.98% moisture

After consultation with WRC corporate, technical, and legal personnel, it appears that the Form Code of W501 (if lime or hydroxide is used to precipitate your metals) or W519 (other inorganic sludges) might be appropriate choices to be used in preparing your submission. These codes are from the Washington Department of Ecology Book 2 Guidebook and Codes. Additionally, the Management Method Code of H010 (metals recovery including retorting, smelting, etc.) would be applicable to WRC's recycling process. WRC expands on the H010 description with "thermal concentration and compounding to produce metal concentrate products via an industrial process," which best describes WRC's recyclable material management.

Please be advised that in accordance with 40 CFR 262.11, the ultimate decision as to the classification of the hazardous waste (e.g., the Form Code) rests with the generator. The views expressed by WRC herein, should not be considered as legal advice or substituted for the more accurate generator's technical knowledge or laboratory analysis of the recyclable material and the generation process used.

If you have any questions regarding this information, please contact me at (602) 233-9166, ext. 303.

Sincerely,

**WORLD RESOURCES COMPANY**

Charlie Gish  
Director of Marketing & Business Development

